AMC 2445 2445a

2/4 CHANNEL POWER AMPLIFIER

AMC™
HOME
Entertainment
Center

AMC
HIEJC products with 25 year LIFE using MODULE concept

INSTRUCTIONS FOR INSTALLATION AND OPERATION

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

ATTENTION:
RISQUE DE CHOC ELECTRIQUE N OUVRIR PAS

AFIN DEVITER UN CHOC ELECTRIQUE ET LES CONSEQUENCES GRAVES QUI POURRAIENT EN RESULTER, TENTEZ PAS D'OUVRIR L'APPAREIL ET DE TOUCHER AUX COMPOSANTS INTERNES SANS LA PRESENCE D'UNE PERSONNE QUALIFIEE.

PRECAUCION:
RIE SGO DE ELECTROCHOQUE NO ABRIR LA TAPA

PARA REDUCIR EL RIESGO DE SACUDIDAS ELECTRICAS, NO DEBERA QUITARSE LA TAPA (NI PARTE POSTERIOR). CONSULTESE AL PERSONAL CAPACITADO PARA LAS REPARACIONES INTERNAS.

WARNING: TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
ADVERTENICIA: PARA EVITAR EL RIESGO DE INCENDIO O SACUDIDA ELECTRICA, NO DEBERA EXPONERSE ESTE APARATO A LA LLUVIA O HUMEDAD.

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARISED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE..

ATTENTION: POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR. UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SILES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCuNE PARTIE FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

PRECAUCION: PARA EVITAR SACUDIDAS ELECTRICAS, NO DEBERA UTILIZARSE ESTA ÇLAVIJA POLARIZADA CON UN CORDON DE PROLONGACION, RECEPTACULO U OTRO TIPO DE SALIDA A MENOS QUE SE HAYAN INSERTASO COMPLETAMENTE LAS LENGÜETAS PARA EVITAR SU EXPOSICION.

NOTE: Some AMC products are equipped with dual or multi-voltage transformers (which is indicated on the back panel). If you wish to change the voltage, please bring your unit to an authorised AMC service technician for internal conversion.

ATTENTION: Quelques pièces AMC sont munies de transformateurs à double ou à multi-voltage (indiqué au panneau arrière). Si vous voulez changer le voltage, veuillez apporter votre appareil au fournisseur de AMC pour le transformer.

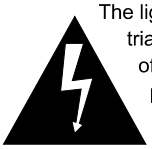
ZUR BEACHTUNG: Einige AMC Geräte sind mit Umschaltern für unterschiedliche Netzspannungern ausgerüstet (Ein Vermerk auf der Rückseite weist darauf hin).

Die Anpassung, wenn notwendig, muß von einem qualifizieren Techniker in einer AMC Servicestation vorgenommen werden.

NOTA: Ciertos componentes de AMC están dotados de transformadores de doble tensión o de varias tensiones (lo que se indica en el panel posterior). Si se desea cambiar la tensión, sírvanse llevar el aparato a un técnico autorizado por AMC para su conversión interna.

NOTE TO CATV systems installer: This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

NOTA PARA EL INSTALADOR DE ANTENAS DE TELEVISION COLECTIVAS: La presente advertencia se provee para llamar la atención del instalador al Artículo 820-22 de NEC (Córdigo Eléctrico Nacional) donde se facilitan las directrices para la pertinente puesta a tierra y que especifica en particular que el condutor a tierra del cable debe connectarse al sistema de conexión a tierra del edificio, lo más proximo posible al punto de entrada del cable.



The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated" dangerous voltage" within the product's enclosure; that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

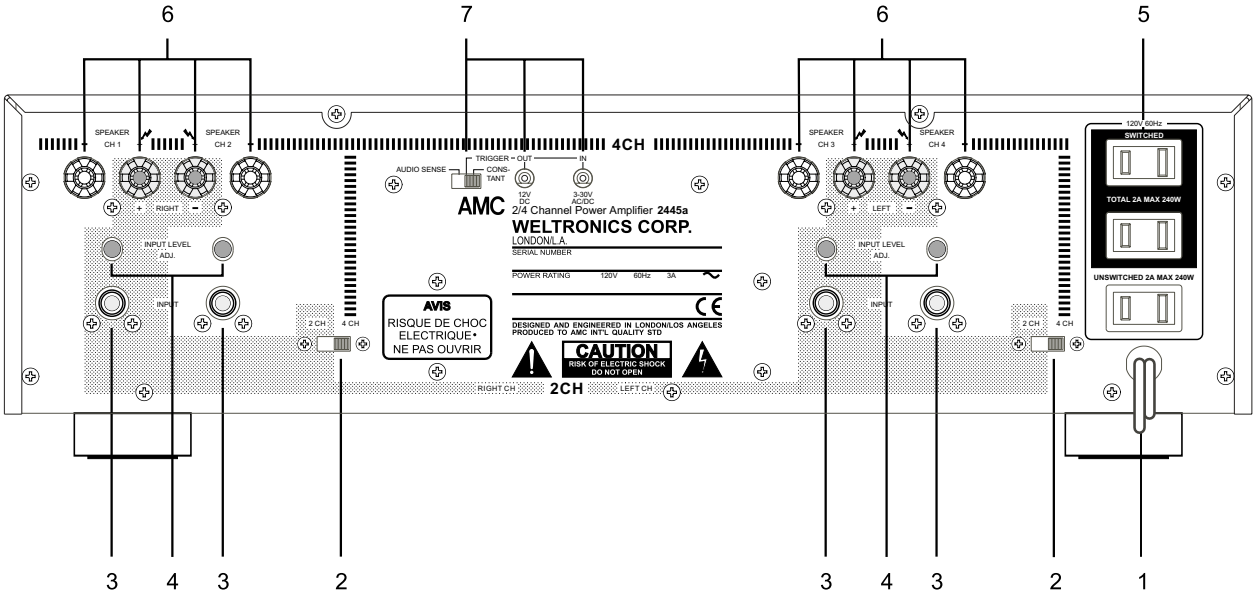
INSTALLATION NOTES

1. Since the 2445/2445a generates modest amounts of heat, adequate ventilation is required. Do not place the amplifier on a soft surface such as a carpeted surface that may block the ventilation holes of the bottom cover. Also, avoid obstructing the ventilation holes in the top cover.

2. CAUTION: To prevent the risk of fire or shock, do not allow any liquid or moisture to enter into the internal parts of this product. If any liquid accidentally enters this product, shut off the power and remove the AC power cord immediately. If the liquid is anything other then clean water or pure alcohol, have the product examined by a service technician. Servicing of this product should be referred to a qualified service technician.

REAR PANEL CONNECTIONS/FRONT PANEL CONTROLS

REAR PANEL



1. AC LINE CORD
2. 2CH/4CH "MODE" SWITCHES
3. INPUTS
4. INPUT LEVEL CONTROLS
5. CONVENIENCE AC OUTLETS
6. LOUDSPEAKER TERMINALS
7. AUDIO SENSE/ TRIGGER/ CONSTANT SWITCH

FRONT PANEL

1. POWER SWITCH AND POWER INDICATOR

REAR PANEL CONNECTIONS

1. AC LINE CORD.
Plag the AC line cord into a nearby wall outlet that provides the correct AC power line voltage, or into a convenience outlet on any AMC product.

2. 2CH/4CH "MODE" SWITCHES.
There are two slide switches on the back panel labelled "2CH 4CH". These switches allow the 2445/2445a to opreated in several modes depending on the number of loudspeakers to be connected. These modes of operation are defined as follows;-
2 CHANNEL MODE. With both switches in the 2CH. position, the 2445/2445a becomes a two channel (stereo) amplifier capable of driving two 8 ohm loudspeakers at 90 watts per channel. In this mode, the 2445/2445a can be used as a high power, audiophile quality, stereo power amplifier.
CAUTION: In the 2CH. mode, the speaker terminals should be directly wired to the loudspeaker and not to any accessory device like headphones adaptors etc. That may share a common ground with other channels.
4 CHANNEL MODE. With both switches in the 4CH. position, the 2445/2445a becomes a four channel amplifier capable of driving four 4 ohm loudspeakers at greater than 45 watts per channel. In this mode, the 2445/2445a can be used for Dolby surround sound systems and multi-room type applications.

3. INPUTS.
There are four RCA photo connectors on the back panel that connect to the inputs of each of the four power amplifiers. Connections to these inputs are made with reference to the MODE SWITCH settings described above;-
2 CHANNEL MODE. Connections for the left channel input can be made via CH3 RCA input connector and for the right channel input, use the input connector of CH1.
NOTE: In this mode, the input photo connectors of CH2 and CH4 are disconnected.
4 CHANNEL MODE. In this mode, the 2445/2445a opreates as a 4 channel amplifier. Connections to the inputs of these amplifiers are made through the RCA phono connectors of CH1 through 4.

4. INPUT LEVEL CONTROLS.
Each channel of the 2445/2445a has its own, independant level control. Before turning on the 2445/2445a for the first time, make sure that all level controls are set to their fully clockwise position. These controls can be used for various functions. For example, they can be used to match the levels of loudspeakers in a multi-room installation, or to lower the sensitivity of the power amplifier, so that the volume control on the pre-amplifier is at a more convenient and usable position. They can also be used to optimise the balance in a stereo system.
NOTE: In the 2 channel mode, only the input levelcontrols of CH1 and CH3 are operative. The controls for CH2 and CH4 are switched out of circuit.

5. CONVENIENCE AC OUTLETS.
There are 2 switched AC outlets and one unswitched outlet on the back panel of 120V versions of the 2445/2445a. For 220V/230V/240V version. there is only one unswitched AC outlet. These outlets can be used to provide AC power for other audio or video components.

6. LOUDSPEAKERS TERMINALS
The 2445/2445a is equipped with binding post type speaker terminals that are designed to handle the extremely high peak currents that this amplifier is capable of giving. Connections from these terminals to the loudspeakers should be made with heavy-duty wire. Stranded wire of 16 gaugeor thicker is recommended especially if low impedance loudspeakers are used. The following describes the connections for 2 channel and 4 channel

operation;-

4 CHANNEL MODE. When the MODE SWITCH of the 2445/2445a are set to 4 channel operation, simply connect the wires from one loudspeaker to the terminals (marked - and +) of CH1, the second speaker to CH2 and so on. Make sure that the red terminal on each loudspeaker is connected to the corresponding red terminal on the amplifier and likewise for the blck terminals.

2 CHANNEL MODE. When the MODE SWITCHES are set to 2 channel opreation, only the red terminals on the 2445/2445a areused. For this mode of opreation, connect the red terminal of the right speaker to the red terminal of CH1 and the black speaker terminal to the red terminal of CH2. The left speaker is connected in a similar way, where the red terminal of the speaker is connectored to the red terminal of CH3 and the black terminal of the speaker is connected to the red terminal of CH4.

NOTE: The 2445 amplifier is normally used in 2 or 4 channel modes. However, it can also be set to operate as a 3 channel amplifier that is capable of driving one 8 ohm loudspeaker at 90 watts and two 4 ohm loudspeakers at greater than 45 watts per channel. Typical applications include, satellite/subwoofer systems and Dolby surround sound decoder systems. To set the 2445/2445a in this mode of operation, please consult your AMC dealer.

7. AUDIO SENSE/TRIGGER/CONSTANT SWITCH

The remote power switch is located on the back panel of the AMC 2445a and provides the following functions; (note that this feature is only valid for 2445a, please skip to next part if your model is 2445)

AUDIO SENSE. When the remote power switch is set in the AUDIO SENSE position, the 2445a is turned on or off automatically, depending on the audio signal level at the inputs. With an audio signal greater than 10 mV at any of the four stereo inputs of 2445a, the amplifier will automatically turn on. If the signal level drops below this level, the amplifier will remain on for a period of approximately 5 minutes before it automatically reverts to stand_by mode.

Please note that when AC power is first applied to the 2445a while the remote power switch is in the AUDIO SENSE position, the amplifier will automatically turn on, even without an audio signal being present at any of the audio inputs. However, after approximately 5 minutes, the amplifier will revert to stand_by mode, assuming no signals are present at any of the inputs.

TRIGGER. When the remote power switch is set in the TRIGGER position, the AMC 2445a can be turned on automatically by an external trigger voltage. The trigger voltage is applied to the trigger input socket, located on the back panel of the 2445a. This trigger voltage can originate from a system controller or from another 2445a. The sensitivity of this input ranges from +3Vdc to +30Vdc and will also accept AC voltages over the same range. The current required from the trigger source is only 0.2mA.

The 2445a is also provided with a trigger output socket, also located on the back panel. When the 2445a is turned on, the trigger output socket provides a +12Vdc signal that can be looped through or "daisy_chained" to the trigger input of another 2445a amplifier (or other component) in a multi component installation. When the external trigger voltage is set to 0V, the 2445a will be in stand_by mode and the voltage from the trigger output socket will likewise be 0V.

CONSTANT. When the remote power switch is set in the CONSTANT position, the power on and off states of the AMC

2445a are controled by the front panel master power on/off switch. In this position, the 2445a has the same functionality as the original 2445.

NOTE: The bi-color power LED above the front panel power switch, indicates the power status of the 2445a. This LED will light up RED when the 2445a is in stand-by mode and GREEN when turned on.

FRONT PANEL.

1.POWER SWITCH AND POWER.

The press button switch marked power can be used to switched the 2445/2445a on or off. When the 2445/2445a is switched on, the led above the power switch will light.

SPECIFICATIONS

2 CHANNEL MODE

Power output into 8 ohms (20Hz~20KHz) 90W
With both channels driven

Rated THD. 0.03%
1KHz clipping power into 8 ohm 100W
Damping factor .....>100
Input sensitivity for 1W/90W into 8 ohm 91mV/866mV

4 CHANNEL MODE

Power output into 4 ohms (20Hz-20KHz) 45W
With all channels driven

Rated THD. 0.05%
1KHz clipping power into 4 ohm 50W
Damping factor .....>100
Input sensitivity for 1W/45W into 4 ohms 130mV/866mV

Input impedance .....R=10K C=200pf
Frequency response 20Hz~20KHz .....+/-0.5dB
"A" WTD. singal to noise ratio (ref. 1W/8 ohms) 100dB

Dimensions (WxHxD) 430x112x288mm
Net weight 9.5kg
Shipping weight 10.5kg
Power consumption 360W

Weltronics Corp. reserved the right to improve its products at any time. Specifications are subject to change without notice.

SAFETY INSTRUCTION

1. READ INSTRUCTIONS

All the safety and operating instructions should be read before the appliance is operated.

2. RETAIN INSTRUCTIONS

The safety and operating instructions should be retained for future reference.

3. HEED WARNINGS

All warnings on the appliance and in the operating instructions should be adhered to.

4. FOLLOW INSTRUCTIONS

All operating and use instructions should be followed.

5. WATER AND MOISTURE

The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

6. CARTS AND STANDS

The appliance should be used only with a cart or stand that is recommended by the manufacturer.

6A. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

7. WALL OR CEILING MOUNTING

This equipment is not designed for use mounted on a wall or a ceiling.

8. VENTILATION

The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings, or placed in a built-in installation, such as bookcase or cabinet that may impede the flow of air through the ventilation openings.

9. HEAT

The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

10. POWER SOURCES

The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

11. POWER-CORD PROTECTION

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance

12. CLEANING

The appliance should be cleaned only as recommended by the manufacturer.

13. NON USE PERIODS

The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

14. OBJECT AND LIQUID ENTRY

Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

15. SERVICING

The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

16. DAMAGE REQUIRING SERVICE

The appliance should be serviced by qualified service personnel when:

a) The power-supply cord or the plug has been damaged; or
b) Objects have fallen, or liquid has been spilled into the appliance; or
c) The appliance has been exposed to rain; or
d) The appliance does not appear to operate normally or exhibits a marked change in performance; or
e) The appliance has been dropped, or the enclosure is damaged.

17. POWER LINES
(APPLIES TO TUNER AND RECEIVERS ONLY)

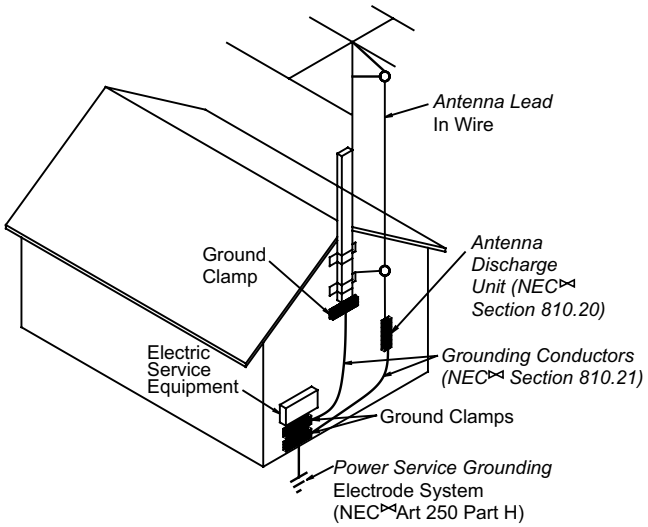
An outdoor antenna should be located away from power lines.

18. OUTDOOR ANTENNA GROUNDING
(APPLIES TO TUNER AND RECEIVERS ONLY)

If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges.
Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure.

a) Use No. 10 AWG (5.3 mm^2) copper, No. 8 AWG (8.4 mm^2) aluminum, No. 17 AWG (1.0 mm^2) copper-clad steel or bronze wire, or larger, as a ground wire.
b) Secure antenna lead-in and ground wires to house with stand-off insulators spaced from 4-6 feet (1.22-1.83 m) apart.
c) Mount antenna discharge unit as close as possible to where lead-in enters house.
d) Use jumper wire not smaller than No.6 AWG (13.3 mm^2) copper, or the equivalent, when a separate antenna-grounding electrode is used. See NEC Section 810-21(j).

Antenna Grounding According to
the National Electrical Code



⋈ National Electrical Code
Available from Library, book stores, or National Fire Protection Association (Batterymarch Park, Quincy. MA 02269).

WELTRONICS CORP.
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